

**BY ORDER OF THE COMMANDER
434TH AIR REFUELING WING**

**434TH AIR REFUELING WING
INSTRUCTION 91-201**

31 OCTOBER 2012

Safety

BLANK AMMUNITION SAFETY



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This instruction implements Air Force Policy Doctrine (AFPD) 91-2, *Safety Programs*. It establishes the directed procedures for using and handling blank ammunition. It outlines responsibilities, issue, turn-in, expenditure, and controlling and inventory procedures, emergency or abnormal conditions action and safety according to Air Force Manual (AFMAN) 91-201, and Air Force Reserve Command (AFRC) Supplements, *Explosive Safety Standards*, paragraph 7.25.1.1-7.27.3-., and applicable supplements. This applies to all assigned 434th Air Refueling Wing (ARW) personnel that use blank ammunition (ammo) for training. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using AF Form 847, *Recommendation for Change of Publication*; route AF Form 847s from the field through Major Command (MAJCOM) publications/forms manager. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <https://www.my.af.mil/gcss-af61a/afirms/afirms/>. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

This is the initial publication of 434 ARW91-201, *Blank Ammunition Safety*.

1. Responsibilities:

1.1. It is the responsibility of all commanders or their designated representatives to ensure that live ammunition is not introduced into a training environment where live and blank ammo could be commingled or mistaken for each other.

1.2. It is the responsibility of the 434th MXS/MXMW Munitions Inspectors to ensure that customers receive the proper blank ammo requested.

1.3. It is the responsibility of the 434th MXS/MXMW Munitions Inspector to visually inspect all blank ammo to verify that no live ammo has been commingled with blank ammo.

1.4. Users are directly responsible for the control and use of ammo issued to them for either real world or exercise purposes. Accountability of assets, to include expenditures, will be validated upon the issue and turn-in of the assets, at the beginning and end of each shift, or whenever required to eliminate a discrepancy.

2. Issue, Turn-In, Expenditure, and Controlling Procedures:

2.1. Issue:

2.1.1. The procedures for issuing, turn-in, and reporting expenditures are located in attachment 5 of Air Force Instruction (AFI) 21-201, *Conventional Munitions Maintenance Management*.

2.1.2. All assets will be issued from 434 MXS/MXMW.

2.1.3. Once assets are issued to a custody account, it is the responsibility of that organizational commander or designated representative to issue the ammo to their personnel using an AF Form 1297, *Temporary Issue/Receipt Document*. Forms will be maintained for a period of 90 days from the date of the exercise termination.

2.1.4. Once issued to an authorized individual, the ammo may be distributed to those persons requiring munitions for training purposes as long as all persons are identified and briefed on safety and accountability.

2.1.5. Personnel and equipment will be inspected to ensure that live rounds of ammo are not introduced into an exercise/training environment.

2.1.6. Units must provide training to emphasize safe handling, weapon operation, use of blank and bird control ammo, and operator maintenance. This training should be documented in the Career Field Education and Training Plan, or on AF Form 1098, *Special Task Certification and Recurring Training*, IAW AFMAN 31-229, Para 4.

2.1.7. Under no circumstances will blank ammo be issued to other than appointed MXS, SFS, CES personnel (account custodians), or an individual trained and qualified IAW this wing instruction and AFMAN 91-201, Paragraphs 7.25, 7.26, & 7.27.

2.2. Turn-in:

2.2.1. All unexpended rounds will be returned to the point of issue, along with any dud/damaged ammo, upon completion of the exercise. Commanders or their designated representatives will ensure all personnel and equipment are inspected for any live rounds, and that live and blank ammo is segregated.

2.2.2. All unexpended munitions will be returned to their original containers according to lot number. The quantity will be annotated on a piece of tape placed over the original quantity.

2.2.3. Commanders or their designated disinterested representatives will visually inspect all ammo turned-in. Segregate live, blank, and expended rounds and upon termination

return them to 434 MXS/MXMW. Unexpended rounds must be returned in their original containers.

2.3. Controlling:

2.3.1. Commanders will designate a disinterested representative(s) to monitor the installation/removal of blank ammo from magazines.

2.3.2. During exercises involving training munitions, all magazines loaded with "Blank" ammo will be marked with the color blue. Use blue paint or blue tape a minimum of 3" wide. On the bottom 2/3 of the magazine to mark magazines loaded with blank munitions.

2.3.3. Live ammo is prohibited in the exercise area unless absolutely necessary.

2.3.3.1. Personnel armed with live ammo are prohibited from participating in any exercise involving blank munitions.

2.3.3.2. When it is necessary to have live ammo present at an exercise involving blank munitions; the guard weapon should be an M9 to prevent commingling of training and live munitions.

2.3.3.2.1. If the guard weapon is an M Series Weapon, the 30 round magazines loaded with live ammo will be marked with red tape or paint no less than three inches wide visible on the bottom 2/3 of the magazine.

2.3.4. At no time will blank ammo be fired through a weapon that does not have a Blank Firing Adapter properly installed.

3. Exact location and method of employment:

3.1. The commander will appoint an Exercise Team Chief (ETC).

3.2. The ETC will prepare written procedures specific to each exercise using Attachment 4 of this document.

3.2.1. Attachment 4 will be coordinated with the following authorities, in the following order:

3.2.1.1. ETC (for approval/signature)

3.2.1.2. Wing Weapons Safety Manager (WWSM) (for approval/signature)

3.2.1.3. Responsible Commander (for approval/signature)

3.2.1.4. WWSM (for filing)

4. Emergency or Abnormal Conditions Actions:

4.1. Immediately report all accidents or incidents to your supervisor or senior member of your team.

4.2. A live round of ammo mixed in with blank ammo is an emergency situation. If found, stop all exercise activities, notify your supervision and the Munitions Section, immediately. Exercise will not continue until authorized personnel can determine verification of ammo.

4.3. The Safety Official designated by the Commander or Exercise Supervisor will have a cellular telephone or radio to enable him/her to contact emergency personnel to include the Security Forces Control Center in the event of a mishap or abnormal condition.

4.4. The Safety Official will obtain a list of emergency numbers to contact from the exercise area in the event of a mishap or abnormal condition. Appointed individual will ensure the Security Forces Commander, Security Forces Controller, Munitions Section, Base Medical Personnel, Fire Department and Weapons Safety offices are notified of any mishaps and complete any necessary paperwork.

4.5. Unexploded Ground Simulators/Pyrotechnics.

4.5.1. Unexploded ordinance will be marked with a red flag or any other highly visible marking device to facilitate their identification.

4.5.2. Explosives Ordinance Disposal (EOD) will be contacted through the Safety Official, and EOD will be the only personnel designated to breach the cordon surrounding the dud rounds.

4.5.3. At no time will dud rounds be broken open.

4.6. In the event a round fails to fire, take the appropriate immediate action detailed in the weapon's operator manual.

4.7. In the case of an abnormal condition other than an emergency, stop the operation and contact the supervisor who will determine an appropriate course of action for the situation. An abnormal condition is a condition other than an emergency, which is not covered elsewhere, but warrants further consideration to determine if other actions are necessary to ensure a safe operation. Ensure the Wing Weapons Safety Office is notified of these situations.

5. Inventory Procedures:

5.1. A complete inventory of all blank and live ammo will be conducted prior to the start of the exercise, at the change of shift, at the end of the day, and at the end of the exercise.

5.2. All out of balance conditions shall cause the exercise to be terminated until the out of balance condition is resolved.

5.3. Attachment 2 will be used to document the inventory of all live ammo. Attachment 3 will be used to document the inventory of all blank ammo. Forms will be maintained for a period of 90 days from the date of the exercise termination.

6. Munitions Residue: Process/certify munitions residue from flightline and demilitarization operations for turn-in according to Technical Order (TO) 11A-1-60.

7. Expenditures: To the maximum extent possible, all expended brass generated during the training exercise will be picked up, inspected, placed in containers and returned to the Munitions Section.

8. Training:

8.1. A safety briefing will be given prior to commencing any training with munitions or explosives. All personnel must be briefed regarding their responsibilities from a safety and

accountability standpoint. The briefing must be recorded and the documentation will be kept for a minimum of 90-days. Records must include the following:

- 8.1.1. Name of the personnel who received the briefing.
- 8.1.2. Date the briefing took place.
- 8.1.3. A description, copy or location of briefing materials used to brief personnel.
- 8.1.4. The name of the person who provided the briefing.
- 8.2. The safety briefing will contain as a minimum the following points.
 - 8.2.1. Ammo identification, to include pictures of blank and live ammo.
 - 8.2.2. Blank/training ammunitions will not be fired/discharged any closer to personnel than specified below.
 - 8.2.2.1. 5.56mm blank ammo, P/N: M200 will be fired no closer than 20 feet. P/N M200 ammo is used in M16/M16A2 /M4 rifles, GUU-5/P sub machine guns and M249 automatic rifles. Air Force TOs 11W3-5-5-41, *Operator's Manual, Rifle*, 5.56mm, M16A2, and 11W3-5-5-51, *Operator's Manual, Machine Gun*, 5.56mm, M249.
 - 8.2.2.2. 7.62 blank ammo, P/N: M80, will be fired no closer than 20 feet. M80 ammo is used in the M60/M240 machine guns in accordance to TO 11W2-6-4-11, *Operator's Manual, Machine Gun*, 7.62mm, M60.
 - 8.2.3. Prior to starting or terminating training, conduct a thorough check of all ammo pouches, rucksacks, mobility bags and magazines for live ammo.
 - 8.2.4. Prior to firing any weapon, all personnel will be thoroughly indoctrinated in the proper handling of the weapon.
 - 8.2.5. All ammo will be pre-checked to determine if they are the types intended to be fired.
 - 8.2.6. Never allow a round to be chambered unless it will be immediately fired.

WILLIAM T. CAHOON, Colonel, USAFR
Commander

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFMAN 91-201, *Explosives Safety Standards*, 12 January 2011

AFMAN 91-201, AFRC SUP, *Explosives Safety Standards*, 5 March 2012

AFI 21-201, *Conventional Munitions Maintenance Management*, 07 March 2012

AFI 91-202, *The US Air Force Mishap Prevention Program*, 5 August 2011

AFPD 91-2, *Safety Programs*

AFRC Sup, *Explosive Safety Standards*, paragraph 7.25.1.1-7.27.3-

AF IMT 847, *Recommendation for Change of Publication*

AF Form 1297, *Temporary Issue/Receipt Document*

AF Form 1098, *Special Task Certification and Recurring Training*

Air Force Technical Orders (TO) 11W3-5-5-41, *Operator's Manual, Rifle, 5.56mm, M16A2*

Air Force Technical Orders (TO) 11W3-5-5-51, *Operator's Manual, Machine Gun, 5.56mm, M249*

Air Force Technical Orders (TO) 11W2-6-4-11, *Operator's Manual, Machine Gun, 7.62mm, M60*

Adopted Forms

AF Form 1297, *Temporary Issue/Receipt Document*

AF Form 1098, *Special Task Certification and Recurring Training*

Abbreviations and Acronyms

AF—Air Force

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFPD—Air Force Policy Doctrine

AMMO—Ammunition

ARW—Air Refueling Wing

EOD—Explosives Ordinance Disposal

ETC—Exercise Team Chief

GBS—Ground Burst Simulator

IAW—In Accordance With

OPR—Office of Primary Responsibility

T.O.—Technical Order

WWSM—Wing Weapons Safety Manager

Terms

Ammunition—Any munitions designed to be thrust from a gun barrel by expanding gases resulting from burning propellant. Rockets would not be included in this definition.

Explosives—All ammunition, munitions fillers, demolition material, solid rocket motors, liquid propellants, cartridges, pyrotechnics, mines, bombs, grenades, warheads of all types, explosives elements of ejection and aircrew egress systems, air-launched missiles and those explosive components of missile systems and space systems, and assembled kits and devices containing explosive material. Explosives, explosives weight, net weight, and other like terms also refer to the fillers of an explosive item. Fillers may be explosive mixtures, propellants, pyrotechnics, and other toxic substances. This term does not include liquid fuels and oxidizers that are not used with missiles, rockets, and other such weapons or explosive items.

Munitions—See “Explosives.”

Attachment 2**FIELD EXERCISE LIVE MUNITIONS ACCOUNTABILITY LOG**

Date:

Field Munitions Custodian:

Total Live Ammunition Taken for Exercise:

9MM Ball: _____

5.56MM Clipped: _____

5.56MM Linked: _____

7.62MM Linked: _____

Issued Live Ammunition:

9MM Ball: Rounds To: Individuals (AF Form 1297)

5.56MM Clipped: Rounds To: Individuals (AF Form 1297)

5.56MM Linked: Rounds To: Individuals (AF Form 1297)

7.62MM Linked: Rounds To: Individuals (AF Form 1297)

Issued Training Explosives:

Issued To:

Type Issued (Smoke Grenade, Trip Flare, etc., on AF Form 1297):

Quantity Issued:

Total Live Ammunition Returned:

9MM Ball: Rounds From:

5.56MM Clipped: Rounds From:

5.56MM Linked: Rounds From:

7.62MM Linked: Rounds From:

Total Training Explosives Returned:

Type:

Quantity:

I certify that the above munitions were issued in the exercise and that all live ammunition has been turned in. I also certify that all magazines/clips were empty of all rounds before and again emptied after the exercise.

Name & Rank of Field Munitions Custodian

Signature

Date

Name & Rank of Exercise Coordinator

Signature

Date

Attachment 3

FIELD EXERCISE BLANK AMMUNITION ACCOUNTABILITY LOG**Date:**

Field Munitions Custodian:

Total Blank Ammunition Taken for Exercise:

5.56MM Single: _____

5.56MM Linked: _____

7.62MM Linked: _____

Issued Blank Ammunition:

5.56MM Single: Rounds To: Individuals (AF Form 1297)

5.56MM Linked: Rounds To: Individuals (AF Form 1297)

7.62MM Linked: Rounds To: Individuals (AF Form 1297)

Shift Change Inventory:

Day Shift:

5.56MM Single: _____

5.56MM Linked: _____

7.62MM Linked: _____

Swing Shift:

5.56MM Single: _____

5.56MM Linked: _____

7.62MM Linked: _____

Returned Blank Ammunition:

5.56MM Single: Rounds From:

5.56MM Linked: Rounds From:

7.62MM Linked: Rounds From:

I certify that the above munitions were issued in the exercise and that all blank ammunition has been turned in. I also certify that all magazines/clips were empty of all rounds before and again emptied after the exercise.

Name & Rank of Field Munitions Custodian	Signature	Date
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Name & Rank of Exercise Coordinator	Signature	Date
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Attachment 4

EXERCISE SPECIFIC WRITTEN PROCEDURES/PARTICIPANT BRIEFING

A4.1. Personnel Limits. Personnel will adhere to personnel limits while employing the use of explosives. Supervisors are responsible for enforcing the following personnel limits for the duration of the exercise: (Ref: AFMAN 91-201, Para 7.3.1. and Para 7.5)

Supervisors: _____

Workers: _____

Casuals: _____

A4.2. Explosives Limits. Explosives limits will expose personnel to the minimum amount of explosives necessary to ensure the success of the exercise. This exercise will be limited to the deployment of the following amount of explosives: (Ref: AFMAN 91-201, Para 7.3.2. and Para 7.6)

Hazard Class/Division 1.____ Compatibility Group____ Nomenclature_____

NSN_____, Rounds/Item Quantity_____

Hazard Class/Division 1.____ Compatibility Group____ Nomenclature_____

NSN_____, Rounds/Item Quantity_____

Hazard Class/Division 1.____ Compatibility Group____ Nomenclature_____

NSN_____, Rounds/Item Quantity_____

Hazard Class/Division 1.____ Compatibility Group____ Nomenclature_____

NSN_____, Rounds/Item Quantity_____

A4.3. Exact Location. Specifically detail the location(s) (play area) where munitions will be employed during this exercise. This location will be separated from all sited explosives storage areas by Public Traffic Route Distance (EXCEPTION: Security Forces). Contact the responsible Weapons Safety Manager for further guidance. Personnel will not utilize munitions outside of the following location(s):

A4.4. Safety Requirements. Specify Personal Protective Equipment/Clothing, and additional equipment necessary to ensure a safe and healthful operation. The following clothing/equipment items will be used when necessary throughout the duration of the exercise ("X" all that apply):

A4.4.1. Personal Protective Equipment

___ Protective Eyewear

___ Hearing Protection

___ Safety Toe Footwear

___ Fire Extinguishers (readily available fire extinguishers WILL be provided)

___ Specify number of extinguishers available

___ Gloves

___ Specify Type (i.e. leather, nylon, etc)

___ other (list below)

A4.4.2. Transportation Safety Equipment

- ___ Vehicle Chocks
- ___ Fire Extinguishers (x2 per explosives laden vehicle) 2A:10BC Rated
- ___ Cargo Tie-Down Straps
- ___ Explosives Route Map
- ___ Explosives Vehicle Placards
- ___ Other (list below)

A4.4.3. Additional Safety Requirements

A4.5. Step-by-Step Procedures. Personnel are authorized to employ exercise munitions IAW the following:

- M16-Series Weapons (AFPAM 10-100): Safety – Pg. 98
 Loading – Pg. 103
 Firing – Pg. 104
 Reloading – Pg. 104
 Clearing – Pg. 104
 Immediate Action (SPORTS) – Pg. 105
- M9 (AFPAM 10-100): Safety – Pg. 115
 Loading – Pg. 119
 Firing – Pg. 121
 Reloading – Pg. 119
 Clearing – Pg. 117
 Immediate Action – Pg. 120

Ground Burst Simulator (GBS) (M116A1/M115A2):

1. Pre-Use Inspection:
 - a. Ensure that the fuse is not loose or has not been pulled out of the body of the munitions.
 - b. Ensure the safety clip is properly installed. (If not, notify EOD immediately)
 - c. Ensure the body shows minimal to no wear.
 - d. Ensure the munitions do not exhibit signs of having been exposed to excessive moisture.
2. Operation:
 - a. Remove safety clip
 - b. Grasp string (not plastic end cap) and pull completely through the fuse igniter.
NOTE: Pull cord should separate from simulator
 - c. Drop the simulator into the functioning area.
 - d. Immediately turn your back to the munitions and walk away as quickly as possible.
NOTE: Continue to walk until the noise from the explosion is heard.

Smoke Grenade

1. Pre-Use Inspection:
 - a. Ensure that the safety pin is in-place. (If not, notify EOD immediately)
 - b. Ensure that the body of the munitions is not damaged nor dented deeper than 1/4

inch. (If damage is noted, contact EOD immediately)

2. Operation:

- a. Straighten ends of safety pin.
- b. Pull the pin with one hand while keeping handle covered with palm of other hand.
- c. Drop the grenade into the functioning area.
- d. Immediately turn your back to the munitions and walk away as quickly as possible.

NOTE: The burning time of the fuse is 1.2 to 2 seconds. A delay of five to eight seconds is considered normal. The filler (potassium chlorate, sulfur, baking soda, and dye) burns for approximately 40 seconds.

Additional Procedures to Be Followed:

A4.6. Emergency Action. The following action will be taken during “Real-World” emergency situations:

1. **LIVE ROUND:** If a live-round is found commingled with blank ammunition, the exercise will STOP. The responsible commander will be notified of the situation, and ALL exercise ammunition will be inspected.
2. **MISFIRE PROCEDURES:** Personnel will utilize the “SPORTS” method in AFPAM 10-100, Page 105, if a misfire occurs. If this does not correct the issue, notify supervision immediately.
3. **DUD GBS/SMOKE:** If a GBS/Smoke Grenade is a dud, immediately establish a 200 FT cordon. The nearest EOD function will be notified immediately. The Exercise Team Chief will consider a STOPEX until the dud munitions has been “safe’d” by the EOD function.
4. **Other Emergency Notification Procedures.** The following agencies will be notified as applicable during a “Real-World” Emergency:
 - a. Fire: _____
 - b. Local Safety: _____
 - c. Medical: _____
 - d. Command Post: _____
 - e. EOD: _____
 - f. Security Forces: _____
 - g. Other: _____

A4.7. Designated Disinterested Individual(s). The responsible commander has designated the following individual(s) as the “Designated Disinterest Individual” IAW AFMAN 91-201, Para 7.25.1.1. The following individual will inspect all exercise ammunition, and will certify that only blank ammunition is loaded in exercise magazines.

Name/Rank: _____ Unit: _____

Phone: _____

A4.8. Expended Brass/Residue Turn-In Procedures. All personnel responsible for munitions during the exercise are responsible for being familiar with, and utilizing the following local expended brass/residue turn-in procedures:

Reference: _____

As a minimum the following procedures will be followed:

1. All expended munitions residue, packaging material, and munitions containers will be returned to the issuing munitions management function for inspection and disposition.
2. Using personnel will inspect munitions residue, packaging material, and munitions containers for live munitions prior to turn-in.
3. Unused, serviceable, munitions which have been removed from their shipping/storage containers will be returned to their issuing container prior to transporting to the issuing munitions management function.

A4.9. Additional Safety Considerations. The following additional guidance is mandatory for the duration of the exercise:

A4.10. Coordination and Approval. The following authorities must approve these written procedures prior to implementation. The Exercise Team Chief will ensure that the WWSM (434 ARW/SEW) has been provided with a copy of these procedures after the Responsible Commander has authorized implementation.

Responsible Commander

Exercise Team Chief

Wing Weapons Safety Manager
